

International comparisons of expenditures for education

The proportion of total financial resources that countries invest in education indicate the relative importance that they place on education. The public and private shares indicate where the responsibility lies for funding education in that country. International comparisons of expenditures for education vary considerably in the share of national resources devoted to education, the sources (public or private) of funds spent on education, and the levels of education to which funds are allocated.

- Total expenditures for elementary and secondary education represented 3.9 percent of the U.S. Gross Domestic Product (GDP) in 1995; expenditures for higher education represented 2.3 percent of the GDP in the same year. Total expenditures for all education levels, including preprimary, and all sources combined made up 6.7 percent of the GDP of the United States. Of the G-7 countries, only Canada spent a larger fraction of its GDP on elementary–secondary and higher education than the United States, and France also spent a larger percentage of its GDP than did the United States on elementary–secondary education.
- Some countries rely more heavily than others on expenditures from private sources to finance education. For example, in both the United States and Japan, the percentage of GDP spent on higher education from private sources (1.2 and 0.6, respectively) was higher than the percentage from public sources (1.1 and 0.4, respectively). In other G-7 countries, the percentage from private sources was much smaller than the percentage from public sources. A number of G-7 countries had private funding levels for elementary–secondary schools that were similar to those of the United States, including Canada, France, and Japan.
- Among the G-7 countries, expenditures per student at the elementary and secondary levels in 1995 ranged from \$3,328 and \$4,246 in the United Kingdom to \$5,371 and \$6,812 in the United States, respectively. For higher education, however, expenditures per student varied widely. The United States spent more per higher education student than any other G-7 country and spent more than twice the amount spent in France, Italy, and the United Kingdom.

Public and private expenditures on educational institutions¹ in G-7 countries as a percentage of GDP, by level of education, funding source, and country: 1995

G-7 country	As a percent of GDP					Per student ²		
	Elementary–secondary		Higher education		All levels and sources combined ⁶	Constant 1995 U.S. dollars ³		
	Public sources ⁴	Private sources ⁵	Public sources ⁴	Private sources ⁵		Elementary	Secondary	Higher education
Canada	4.0	0.3	2.0	0.5	7.0	—	—	\$11,471
France	4.1	0.3	1.0	0.2	6.3	\$3,379	\$6,182	6,569
Germany	2.9	0.9	1.0	0.1	5.8	3,361	6,254	8,897
Italy	3.2	(⁷)	0.8	0.1	4.7	4,673	5,348	5,013
Japan	2.8	0.3	0.4	0.6	4.7	4,065	4,465	8,768
United Kingdom	3.8	—	0.9	0.1	—	3,328	4,246	7,225
United States	3.5	0.4	1.1	1.2	6.7	5,371	6,812	16,262

— Not available.

¹ Includes all institutions, public and private, with the exception of Germany and Italy, which include only public institutions, and the United Kingdom, which includes public and government-dependent private institutions.

² Per student expenditures are calculated based on public and private Full-Time-Equivalent (FTE) enrollment figures and expenditures from both public and private sources, where data are available.

³ Purchasing Power Parity (PPP) indices were used to convert other currencies to U.S. dollars. Because the fiscal year has a different starting date in different countries, within-country Consumer Price Indices (CPIs) were used to adjust the PPP indices to account for inflation. See the supplemental note to this indicator for further explanation.

⁴ Public expenditures are defined as direct public expenditures on education institutions plus public subsidies to households and other private entities for education (e.g., tuition and fees), excluding other education-related public aid to students and households (e.g., subsidies for student living costs).

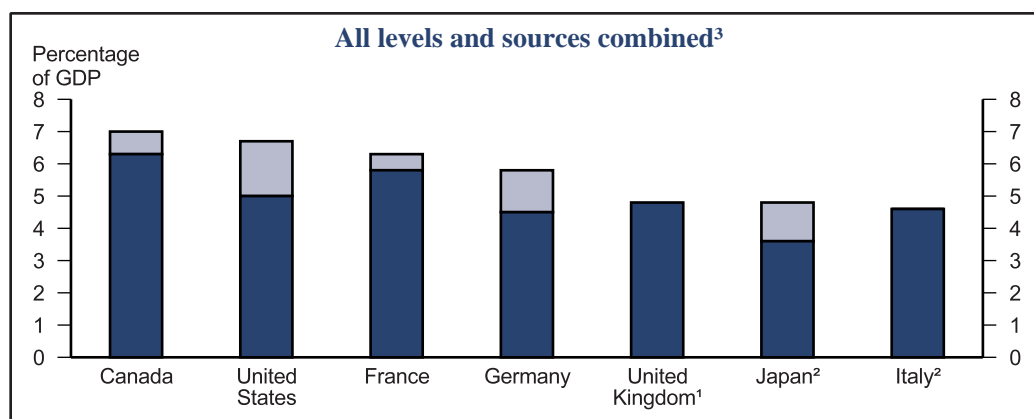
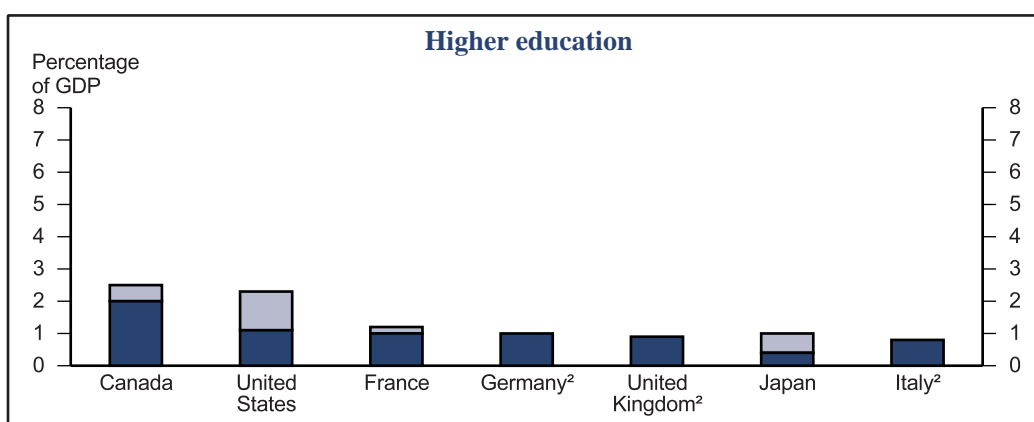
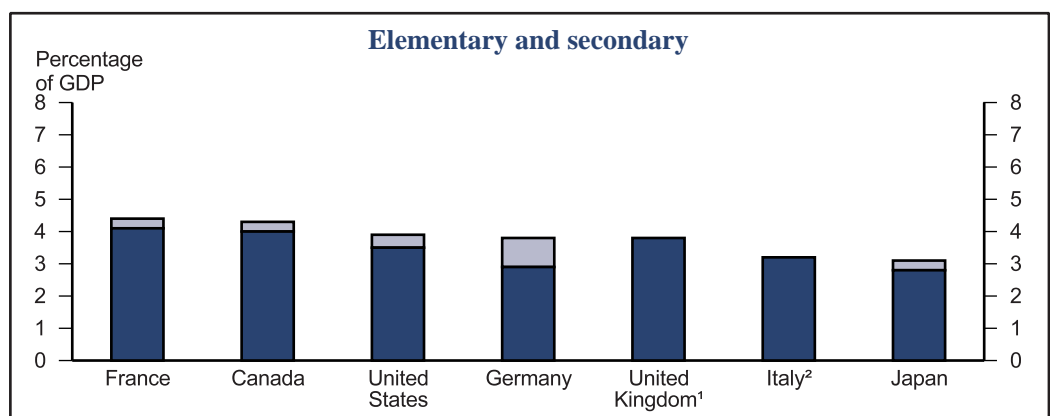
⁵ Private expenditures are defined as private payments from households and other private entities to education institutions, minus any portion derived from public subsidies.

⁶ "All levels combined" includes expenditures on preprimary education and funds classified as "undistributed," a classification reserved for enrollments, expenditures, or programs that cannot be classified by level (e.g., nongraded special education).

⁷ Percentage is less than 0.05.

SOURCE: Organisation for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education at a Glance: OECD Indicators*, 1998.

Public and private expenditures on educational institutions in G-7 countries as a percentage of Gross Domestic Product (GDP), by level of education and funding source: 1995



■ Public sources ■ Private sources

¹ Sources of funds for the United Kingdom were not available.

² Private sources of funds for some countries are less than 1 percent; therefore, percentages may not be discernable in the graphs.

³ "All levels combined" includes expenditures on preprimary education and funds classified as "undistributed," a classification

reserved for enrollments, expenditures, or programs that cannot be classified by level (e.g., nongraded special education).

SOURCE: Organisation for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education at a Glance: OECD Indicators*, 1998.

International comparisons of education expenditures

The purpose of this indicator is to compare expenditures for education in public and private institutions to Gross Domestic Product (GDP).

Definitions

Public education expenditures include funds provided both to public and private schools by federal, state, and local governments either directly or through students. This includes expenditures at public schools funded by public sources and subsidies from government agencies to students at private schools from government agencies.

Private education expenditures are expenditures financed by private sources—households, private nonprofit institutions, businesses, and corporations. This includes expenditures supported by public and private school tuition and fees, such as student expenses for books and materials.

Gross Domestic Product (GDP) is an aggregate measure of the value of goods and services produced in a country.

Expenditures in the United States

Elementary and secondary education

For the United States, *public expenditures for primary and secondary education* include expenditures in local public school districts and private schools; schools administered by religious organizations, funded by state and local taxes, federal programs administered by the U.S. Department of Education (ED); and federal programs operated outside of ED that are not administered by state or local education agencies (e.g., Head Start, Department of Defense Schools, and schools operated by the Bureau of Indian Affairs).

Also included in public expenditures for primary and secondary education are federal expenditures to operate ED and activities such as research, statistics, assessment, and school improvement, and state expenditures to operate state departments of education and other direct state expenditures, including state schools for the deaf and blind and reform schools.

For the United States, elementary education includes education provided to students in grades 1–6; secondary education covers grades 7–12.

Some expenditures, such as those for federal or state agency administration and those for non-graded special education programs, cannot be assigned to particular grade levels, because the expenditures defy strict grade-level categorizations. The United States, like some other countries, has chosen to prorate these expenditures over the grade levels based on the relative size of enrollments, staffing, and teacher salaries. However, other countries have chosen not to allocate such expenditures, classifying them, instead, as “undistributed.”

Higher education

Public expenditures for higher education in the United States include expenditures at both public and private colleges and universities funded by federal, state, and local governments. The Integrated Postsecondary Education Data System (IPEDS), the core postsecondary education data collection program for the National Center for Education Statistics (NCES), gathers institutional reports for revenue received by both public and private institutions from both public and private sources. Expenditures by public and private nonprofit institutions are separated into public and private expenditures based on their relative shares of current fund revenues.

Most federal aid goes to students who then spend it on education (e.g., tuition) and noneducation (room and board) services. For the purposes of calculating public expenditures for higher education in the United States, it was assumed that students spent 60 percent of federally administered Pell grants on education.

With the exception of Pell grant money, public expenditures for less-than-2-year public and private institutions, often called “proprietary” schools, were not available; therefore, the amount for *public expenditures for higher education* in the United States are biased downward. However, since the students participating in these institutions are also excluded from higher education enrollments, the estimate of *public expenditures per student* would be biased upward if the per-student public expenditures in less-than-2-year institutions were less than those in other higher education institutions.

Private expenditures

For the United States, as in other Organisation for Economic Co-operation and Development (OECD) countries, *private expenditures* refer to expenditures funded by private sources—mainly households, private nonprofit institutions, and firms and businesses. These include school fees; materials such as textbooks and teaching equipment; transport to school (if organized by the school); meals (if provided by the school); boarding fees; and expenditures by employers for initial vocational training.

How expenditures are compared across countries

To compare expenditures per student in the United States to expenditures per student in other countries, expenditures must be denominated in a common currency. Conversion of other countries' expenditures to U.S. dollars facilitates comparison with expenditures in the United States. There are at least two methods of conversion: 1) market exchange rates, and 2) Purchasing Power Parity (PPP) indices.

The market exchange rate is the rate at which an individual can exchange the currencies of two countries. It is determined by relative confidence in the governments, their monetary systems, and the economies of the two countries and by the relative demand for the goods and services that the two countries trade. Market exchange rates can be highly volatile.

PPP indices are calculated by comparing the cost of a fixed market basket of goods in each country. Changes over time in a PPP index are determined by the rates of inflation in each country. Since PPP indices are less volatile than market exchange rates, they were used here to adjust expenditures and GDP figures.

Because the fiscal year has a different starting month in different countries, within-country GDP consumer price deflators from the OECD National Accounts database were used to adjust education expenditures when the national fiscal year did not coincide with the calendar year 1994.

Even when expenditures are expressed in common currencies, comparing national expenditures can be difficult because the data are dependent on numerous factors, including the size of the economy, the population, and enrollment rates. In addition, the coverage and character of the education expenditure data that countries submit to the OECD vary. For a detailed examination of some of the problems that exist in comparing education expenditures across countries, see *Education at a Glance: OECD Indicators*, 1998, published by the OECD Center for Educational Research and Innovation.

SOURCE: Organisation for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education at a Glance: OECD Indicators*, 1998.